IN THE CLAIMS:

Please cancel Claims 159-164 without prejudice to or disclaimer of the subject matter contained therein.

Please amend Claims 1-69, 71-72, 75-158, 165-191 and 214-229 as follows (note: all pending claims, whether amended or not, are presented in full text for the Examiner's convenience):

A1 CONT'D

1. (Amended) An apparatus [Apparatus] for providing an electrical signal corresponding to a coordinate position on a screen surface designated by [of] a light source having a cyclically varying intensity, said apparatus comprising:

a detection device that receives [means for receiving] light emitted from [said] the light source, said detection device [and] comprising a plurality of photoelectric conversion elements, arranged in a predetermined physical array, that each generate an output based on the intensity of light received from the light source at the respective element;

difference signal generating means for generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

threshold setting means for setting a threshold value for the difference signal;

A1 CONT'D

selection means for selecting effective photoelectric conversion elements [on the basis of] based on the respective difference signal of each element and the threshold value; and

difference signal output means for outputting the difference signals corresponding to the [selected] effective photoelectric conversion elements selected by said selection means.

2. (Amended) An apparatus [Apparatus] according to claim 1, further comprising:

calculation means for calculating a [performing] coordinate based on [calculation on the basis of] the difference signals output by said difference signal output means [from the selected effective photoelectric elements]; and

coordinate output means for outputting a signal corresponding to the [calculated] coordinate calculated by said calculation means.

3. (Amended) An apparatus [Apparatus] according to claim 2, further comprising:

difference signal detecting [setting] means for detecting the photoelectric conversion element having the [maximum] largest difference signal, [and]

wherein said threshold setting means sets the [a] threshold value based on [the] difference signals of a predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element having the [maximum] largest difference signal [; and

selection means for selecting effective conversion elements based on the threshold value set by the setting means].

A1 CONT'D

4. (Amended) An apparatus [Apparatus] according to claim 3, wherein [:] said detection device [means] comprises a linear array of photoelectric conversion elements; and

said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest [maximum] difference signal.

5. (Amended) An apparatus [Apparatus] according to claim 4, wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

6. (Amended) An apparatus [Apparatus] according to claim 5, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

7. (Amended) An apparatus [Apparatus] according to claim 5, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

A1 CONT'D

8. (Amended) An apparatus [Apparatus] according to claim 4, wherein [:] said threshold setting means identifies [is arranged to identify] a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [;] and [said setting means is adapted to set]

wherein said threshold setting means sets the threshold value based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference

signal.

9. (Amended) An apparatus [Apparatus] according to claim 3, wherein said selection means selects [is adapted to select] a series of consecutive photoelectric conversion elements, including the photoelectric conversion element having the maximum difference signal, as the effective photoelectric conversion elements.

10. (Amended) An apparatus according to claim 2, wherein [:] said calculation means calculates [is adapted to calculate] a centroid position based on [the basis of] the difference signals of the effective photoelectric conversion elements, [;] and

wherein the calculation means calculates [is adapted to calculate] a coordinate value based on the position of the centroid.

A1 CONT'D

11. (Amended) An apparatus according to claim 2, wherein said detection device [means] further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein [the] said threshold setting means sets [is adapted to set] a threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

12. (Amended) An apparatus according to claim 11, wherein said [the] threshold setting means controls [is adapted to control] the number of times that the integrations are [integration is] performed by said integration means.

13. (Amended) An apparatus according to claim 12, wherein said [the] threshold setting means controls [is adapted to control] the integration means to perform the integrations [integration] until the value of the largest difference signal exceeds a predetermined value.

14. (Amended) An apparatus according to claim 12, wherein said [the] threshold setting means controls [is adapted to control] the integration means to perform the integrations [integration] a predetermined number of times.

A1 CONT'D

15. (Amended) An apparatus according to claim 11, further comprising:

skim means for reducing the [value of the] output from the photoelectric conversion elements [means] when the output from the photoelectric conversion elements [element] at the second points in the cycle of variation of the light source exceeds a predetermined value.

16. (Amended) An apparatus according to claim 12, further comprising:

skim means for reducing the [value of the] output from the photoelectric conversion elements [means] when the output from the photoelectric conversion elements [element] at the second points in the cycle of variation of the light source exceeds a predetermined value.

17. (Amended) An apparatus according to claim 13, further comprising:

skim means for reducing the [value of the] output from the photoelectric conversion elements [means] when the output from the photoelectric conversion elements [element] at the second points in the cycle of variation of the light source exceeds a predetermined value.

18. (Amended) An apparatus according to claim 14, further comprising:

skim means for reducing the [value of the] output from the photoelectric conversion elements [means] when the output from the photoelectric conversion elements [element] at the second points in the cycle of variation of the light source exceeds a predetermined value.

19. (Amended) An apparatus according to claim 15, wherein the respective output of each photoelectric conversion element [means] is an electrical charge, and wherein said [the]

A 1 CONT · D skim means removes [is operative to remove] a predetermined amount of electrical charge from the output of each photoelectric conversion element [means].

20. (Amended) An apparatus [Apparatus] according to claim 1, wherein the light source comprises a light-emitting element that projects a light spot [projected] onto the screen surface [from a light emitting element].

21. (Amended) An apparatus [Apparatus] according to claim 1, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

22. (Amended) An apparatus [Apparatus] according to claim 2, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

23. (Amended) An apparatus [Apparatus] according to claim 3, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

24. (Amended) An apparatus [Apparatus] according to claim 4, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

25. (Amended) An apparatus [Apparatus] according to claim 5, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

A1 CONT'D

26. (Amended) An apparatus [Apparatus] according to claim 6, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

27. (Amended) An apparatus [Apparatus] according to claim 7, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

28. (Amended) An apparatus [Apparatus] according to claim 8, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

29. (Amended) An apparatus [Apparatus] according to claim 9, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

30. (Amended) An apparatus [Apparatus] according to claim 10, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

31. (Amended) An apparatus [Apparatus] according to claim 11, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

32. (Amended) An apparatus [Apparatus] according to claim 12, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

A1 CONT'D

33. (Amended) An apparatus [Apparatus] according to claim 13, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

34. (Amended) An apparatus [Apparatus] according to claim 14, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

35. (Amended) An apparatus [Apparatus] according to claim 15, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

36. (Amended) An apparatus [Apparatus] according to claim 16, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

37. (Amended) An apparatus [Apparatus] according to claim 17, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

38. (Amended) An apparatus [Apparatus] according to claim 18, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

39. (Amended) An apparatus [Apparatus] according to claim 19, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

A1 CONT'D

40. (Amended) An apparatus [Apparatus] according to claim 1, wherein said [the] detection means receives [is adapted to receive] light diffused through the screen surface from the [said] light source.

41. (Amended) An apparatus [Apparatus] according to claim 20, wherein said [the] detection means receives [is adapted to receive] light from the [said] light source [spot] reflectively diffused through [from] the screen surface.

42. (Amended) An apparatus [Apparatus] according to claim 1, wherein the cyclical variation of the intensity of the light source comprises alternating the intensity of the light source between a first and a second level.

43. (Amended) An apparatus [Apparatus] according to claim 42, wherein the second level corresponds to a state in which no light is emitted.

44. (Amended) An apparatus [Apparatus] according to claim 1, wherein the dimensions of the light source are arranged so that light emitted from the [said] light source is incident on at least two photoelectric conversion elements of the [a] plurality of photoelectric conversion elements of said [the] detection device [means].

45. (Amended) A coordinate input apparatus for generating a coordinate output signal corresponding to a predetermined position on a detection surface, comprising:

A1 CONT'D

a detection device, [means] comprising a plurality of photoelectric conversion elements arranged in a linear array, for receiving light emitted from a light source designating the [associated with said] predetermined position on the [said] detection surface and having a cyclically varying intensity, each photoelectric conversion element generating an output based on the intensity of light received from the light source at the respective element;

difference signal generating means for generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

threshold setting means for setting a threshold value for the difference signal;

selection means for selecting effective photoelectric conversion elements based on the respective difference signal of each element and [on the basis of] the threshold value; and

coordinate output signal generating means for outputting a coordinate output signal based on [the] difference signals corresponding to the [selected] effective photoelectric conversion elements selected by said selection means.

46. (Amended) A coordinate input apparatus according to claim 45, wherein the threshold setting means sets [is adapted to set] a threshold value based on [the basis of] the mean value of the respective difference signals of the plurality of photoelectric conversion elements.

A1 CONT'D

47. (Amended) A coordinate input apparatus according to claim 45, further comprising:

difference signal detection means for detecting the photoelectric conversion element having the largest [maximum] difference signal value; and

identifying means for identifying a number m of consecutive photoelectric conversion elements situated on either side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [; and]

wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

48. (Amended) A coordinate input apparatus [Apparatus] according to claim 45, wherein [:] said threshold setting means sets [is adapted to set] first and second threshold values for the difference signal, and said [the] apparatus further comprising [comprises]:

control [determination] means for controlling [adopted to control the operation of] said selection means so that said selection means selects the effective photoelectric conversion elements based on the [basis of said] first and second threshold values.

A1 CONT. D

49. (Amended) A coordinate input apparatus [Apparatus] according to claim 48, wherein [:] said control [determination] means controls said selection means so that said selection means selects the effective photoelectric conversion elements based on [is adapted to determine on the basis of] a comparison between the first and second [said] threshold values.

50. (Amended) A method for providing an electrical signal corresponding to a coordinate position on a screen surface designated by [of] a light source having a cyclically varying intensity, comprising the steps of:

receiving light emitted from the [said] light source by using a plurality of photoelectric conversion elements, arranged in a predetermined physical array, that each generate an output based on the intensity of light received from the light source at the respective element;

generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

setting a threshold value for the difference signal;

selecting effective photoelectric conversion elements based on the respective difference signal of each element and [signals on the basis of] the threshold value; and

outputting the [selected] difference signals corresponding to the effective photoelectric conversion elements selected in said selecting step.

A1 CONT'D

51. (Amended) A method according to claim 50, further comprising the steps of:

calculating a [performing] coordinate based on [calculation on the basis of] the [output] difference signals output in said outputting step; and

outputting a signal corresponding to the [calculated] coordinate calculated in said calculating step.

52. (Amended) A method according to claim 51, further comprising the step [steps] of:

detecting the photoelectric conversion element having the largest [maximum] difference signal, [and]

wherein the [setting a] threshold value is set in said setting step based on [the] difference signals of a predetermined number of photoelectric conversion elements positioned adjacent to the photoelectric conversion element having the largest [maximum] difference signal [; and selecting effective difference signals based on the set threshold value].

53. (Amended) A method according to claim 52, wherein [:] a linear array of photoelectric conversion elements is used in said receiving [setting] step, and [including the step of]

wherein [setting] the threshold value is set in said setting step based on the [basis of] difference signals corresponding to the photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest [maximum] difference signal.

A1 CONT'D

54. (Amended) A method according to claim 53, wherein [including the step of: setting] the threshold value is set in said setting step based on the [basis of] difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal [data].

55. (Amended) A method according to claim 54, wherein the threshold value is set in said setting step based on [including the step of:

setting] the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal [data as the threshold value].

56. (Amended) A method according to claim 54, wherein the threshold value is set in said setting step based on [including the step of setting] the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal [data as the threshold value].

A 1 CONT'D

57. (Amended) A method according to claim 53, further comprising [including] the step [steps] of:

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [data; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

58. (Amended) A method according to claim 52, [including the step of] wherein, in said selecting step, [the difference signals corresponding to] a series of consecutive photoelectric conversion elements, including the photoelectric conversion element having the largest [maximum] difference signal, are selected [data] as the effective photoelectric conversion elements [difference signals].

59. (Amended) A method according to claim 51, further comprising [including] the steps of:

calculating a centroid position based on the [basis of the effective] difference signals output in said outputting step; and

calculating a coordinate value based on the position of the centroid.

A1 CONT'D

60. (Amended) A method according to claim 51, wherein said detection step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and]

wherein, in said setting step, [setting] the threshold value is set based on [the basis of] difference signals [data] calculated from the integrated output values of the photoelectric conversion elements.

61. (Amended) A method according to claim 60, further comprising [including] the step of controlling the number of times that the integrations are [integration is] performed.

62. (Amended) A method according to claim 61, [including the step of controlling the integration step to perform the integration] wherein the integrations are performed until the value of the largest difference signal exceeds a predetermined value.

63. (Amended) A method according to claim 61, [including the step of controlling the integration step to perform the integration] wherein the integrations are performed a predetermined number of times.

A1 CONT'D

64. (Amended) A method according to claim 60, further comprising the step of:

reducing the [value of the] outputs from the photoelectric conversion elements when the outputs from the photoelectric conversion elements at the second points in the cycle of variation of the light source exceed a predetermined value.

65. (Amended) A method according to claim 61, further comprising the step of:

reducing the [value of the] outputs from the photoelectric conversion elements when the outputs from the photoelectric conversion elements at the second points in the cycle of variation of the light source exceed a predetermined value.

66. (Amended) A method according to claim 62, further comprising the step of:

reducing the [value of the] outputs from the photoelectric conversion elements when the outputs from the photoelectric conversion elements at the second points in the cycle of variation of the light source exceed a predetermined value.

67. (Amended) A method according to claim 63, further comprising the step of:

reducing the [value of the] outputs from the photoelectric conversion elements when the outputs from the photoelectric conversion elements at the second points in the cycle of variation of the light source exceed a predetermined value.

68. (Amended) A method according to claim 64, wherein the respective output of each photoelectric conversion element is an electrical charge, and

A 1 CONCL.

wherein the step of reducing the outputs [value of the output] comprises removing a predetermined amount of electrical charge from the respective output of each photoelectric conversion element.

69. (Amended) A method according to claim 50, wherein the light source comprises a light-emitting element that projects a light spot [projected] onto the screen surface [from a light emitting element].

70. A method according to claim 50, wherein the light source comprises a light-emitting element positioned adjacent to the screen surface.

A 2 CONCL.

71. (Amended) A method according to claim 50, wherein the light received in said receiving step [light] is a diffused light passing through the screen surface from the [said] light source.

72. (Amended) A method according to claim 69, wherein the light received in said receiving step [light] is a light from the [said] light source [spot] reflectively diffused from the screen surface.

73. A method according to claim 50, wherein the cyclical variation of the intensity of the light source comprises alternating the intensity of the light source between a first and a second level.

74. A method according to claim 73, wherein the second level of the intensity of the light source corresponds to a state in which no light is emitted.

A 3 CONT'D

75. (Amended) A method according to claim 50, wherein [the dimensions of the light source are arranged so that] light emitted from the [said] light source is incident on at least two of the [a] plurality of photoelectric conversion elements.

76. (Amended) A method for providing an electrical signal corresponding to a coordinate position on a screen surface designated by [of] a light source having a cyclically varying intensity, comprising the steps of:

receiving light emitted from the [said] light source by using a plurality of photoelectric conversion elements, arranged in a predetermined physical array, that each generate an output based on the intensity of light received from the light source at the respective element;

generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

setting first and second threshold values for the difference signals; and

determining whether [or not] a selection of [the] effective difference signals is executed on the basis of the first and second threshold values.

A3 CONT'D

77. (Amended) A method according to claim 76, wherein the effective difference signals are determined in said [including the step of controlling the] determining step based on [to determine the effective difference signals on the basis of] a comparison between the first and second threshold values.

78. (Amended) A method according to claim 76, further comprising the steps of:

calculating a [performing] coordinate based on the effective [calculation on the basis of the selected] difference signals; and

outputting a signal corresponding to the [calculated] coordinate calculated in said calculating step.

79. (Amended) A method according to claim 77, further comprising the steps of:

detecting the photoelectric conversion element having the largest [maximum] difference signal, [and setting] wherein the second threshold value is set in said setting step based on the difference signals of a predetermined number of photoelectric conversion elements positioned adjacent to the photoelectric conversion element having the largest [maximum] difference signal; and

selecting effective difference signals based on the second threshold value.

A3 CONT'D

80. (Amended) A method according to claim 79, wherein[:] a linear array of photoelectric conversion elements is used in said receiving [setting] step, and

wherein [including the step of setting] the second threshold value is set in said setting step based on the [basis of] difference signals corresponding to photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest [maximum] difference signal.

81. (Amended) A method according to claim 80, wherein [including the step of: setting] the second threshold value is set in said setting step based on the [basis of] difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference data.

82. (Amended) A method according to claim 81, wherein the second threshold value is set based on [including the step of: setting] the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal [data as the second threshold value].

83. (Amended) A method according to claim 8l, wherein the second threshold value is set based on [including the step of: setting] the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally

A3 CONTID

spaced from the photoelectric conversion element having the largest [maximum] difference signal [data as the second threshold value].

84. (Amended) A method according to claim 80, further comprising [including] the step [steps] of:

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the maximum difference signal being 2m, [data; and]

wherein [setting] the second threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

85. (Amended) A method according to claim 78, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and]

A3 CONT'D

wherein, in said setting step, the first and second threshold values are set based on the [basis of] difference signals [data] calculated from the integrated output values of the photoelectric conversion elements.

86. (Amended) A method according to claim 76, wherein [including the step of: setting] the first threshold value is set based on [the basis of] a mean of the generated [obtained] difference signals.

87. (Amended) A coordinate input method for generating a coordinate output data corresponding to a predetermined position on a detection surface, comprising the steps of:

receiving light, emitted from a light source designating the [associated with said] predetermined position on the [said] detection surface and having a cyclically varying intensity, by using a plurality of photoelectric conversion elements, arranged in a linear array, that each generate an output based on the intensity of light received from the light source at the respective element;

generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

setting a threshold value for the difference signal [data];

A3 CONT'D

selecting effective difference signals based on [the basis of] the threshold value; and

outputting a coordinate output signal based on the [selected] effective difference signals selected in said selecting step.

88. (Amended) A coordinate input method according to claim 87, [comprising the steps of setting] wherein the threshold value is set in said setting step based on [the basis of the] a mean value of the difference signals of the plurality of photoelectric conversion elements.

89. (Amended) A coordinate input method according to claim 87, further comprising the steps [step] of:

detecting the photoelectric conversion element having the largest [maximum] difference signal; and

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [; and

setting] wherein the threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

A3 CONT'D

90. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 50.

91. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 51.

92. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 52.

93. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 53.

94. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 54.

95. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 55.

96. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 56.

A3 CONT'D

97. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 57.

98. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 58.

99. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 59.

100. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 60.

101. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 61.

102. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 62.

103. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 63.

A3 CONT'D

104. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 64.

105. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 65.

106. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 66.

107. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 67.

108. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 68.

109. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 69.

110. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 70.

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CONT'D

111. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 71.

112. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 72.

113. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 73.

114. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 74.

115. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 75.

116. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 76.

117. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 77.

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118. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 78.

119. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 79.

120. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 80.

121. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 81.

122. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 82.

123. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 83.

124. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 84.

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125. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 85.

126. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 86.

127. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 87.

128. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 88.

129. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 89.

130. (Amended) A selection device [means] for use in a coordinate input apparatus for generating a coordinate output signal from output signals of an array of photoelectric conversion elements, the coordinate output signal corresponding to a coordinate position on a screen surface designated by a light source having a cyclically varying intensity, said device comprising:

difference signal receiving means for receiving a difference signal for each photoelectric conversion element corresponding to [the] a difference between the output of the

A3 CONT'D photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

threshold setting means for setting a threshold value for the difference signal;

selection means for selecting effective difference signal signals based on the [basis of the] threshold value; and

output means for outputting the [selected] effective difference signals selected by said selection means.

131. (Amended) A selection device [means] according to claim 130, wherein the threshold setting means [is adapted to set a] sets the threshold value based on [the basis of the] a mean value of the difference signals.

132. (Amended) A selection device [means] according to claim 130, further comprising:

detection means for detecting the photoelectric conversion element having the largest [maximum] difference signal value; and

identifying means for identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion

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elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [; and]

wherein said threshold setting means [is adapted to set] sets the threshold value based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

133. (Amended) A coordinate input apparatus, comprising: [including a]

a selection device [means] according to claim 130; and [, further comprising:]

coordinate output signal generating means for outputting a coordinate output signal based on the [selected] effective difference signals selected by said selection means.

134. (Amended) A coordinate input apparatus, comprising: [including a]

a selection device [means] according to claim 131, and [further comprising:]

coordinate output signal generating means for outputting a coordinate output signal based on the [selected] effective difference signals selected by said selection means.

135. (Amended) A coordinate input apparatus, comprising: [including a]

a selection device [means] according to claim 132, and [further comprising:]

coordinate output signal generating means for outputting a coordinate output signal based on the [selected] effective difference signals selected by said selection means.

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136. (Amended) A selection method for selecting effective data for use in a method for generating a coordinate output signal from output signals of an array of photoelectric conversion elements, the coordinate output signal corresponding to a coordinate position on a screen surface designated by a light source having a cyclically varying intensity, the selection method comprising the steps of:

receiving a difference signal for each photoelectric conversion element corresponding to [the] a difference between an [the] output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

setting a threshold value for the difference signal;

selecting effective difference signals based on [the basis of] the threshold value; and

outputting the [selected] effective difference signals selected in said selection step.

137. (Amended) A selection method according to claim 136, wherein the threshold value is set in said setting step based on [the basis of the] a mean value of the difference signals received in said receiving step.

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138. (Amended) A selection input method according to claim 136, further comprising the steps of:

detecting the photoelectric conversion element having the largest [maximum] difference signal value; and

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

139. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 136.

140. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 137.

141. (Amended) A data carrier carrying processor-implementable instructions for carrying out a method according to [comprising the steps of] claim 138.

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142. (Amended) An apparatus [Apparatus] for providing an electrical signal corresponding to a position on a screen surface designated by [of] a light source having a cyclically varying intensity, comprising:

display means for displaying an image on the screen surface;

detection means for receiving light from the screen surface and comprising a plurality of photoelectric conversion elements, arranged in a predetermined physical array, that each generate an output based on the intensity of light received from the light source at the respective element;

difference signal generating means for generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the intensity of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

threshold setting means for setting a threshold value for the difference signal;

selection means for selecting effective photoelectric conversion elements based on [the basis of] the threshold value; and

coordinate output signal generating means for outputting a coordinate output signal based on the difference signals corresponding to the [selected] effective photoelectric conversion elements selected by said selection means.

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CONT'D

143. (Amended) An apparatus [Apparatus] according to claim 142, wherein [:] said detection means comprises a linear array of photoelectric conversion elements [;] and

wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

144. (Amended) An apparatus [Apparatus] according to claim 143, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

145. (Amended) An apparatus [Apparatus] according to claim 143, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

146. (Amended) An apparatus [Apparatus] according to claim 143, wherein said threshold setting means sets [is adapted to set] the threshold value based on the difference signals of a predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element having the largest [maximum] difference signal.

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CONT'D

147. (Amended) An apparatus [Apparatus] according to claim 146, wherein [:] said threshold setting means identifies [is arranged to identify] a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [;] and

wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

148. (Amended) An apparatus [Apparatus] according to [any of] claim 142, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

149. (Amended) An apparatus [Apparatus] according to [any of] claim 143, wherein said detection means further comprises:

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integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

150. (Amended) An apparatus [Apparatus] according to [any of] claim 144, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

151. (Amended) An apparatus [Apparatus] according to [any of] claim 145, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source

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CONT'D

and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

152. (Amended) An apparatus [Apparatus] according to [any of] claim 146, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

153. (Amended) An apparatus [Apparatus] according to [any of] claim 147, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

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wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

154. (Amended) An apparatus [Apparatus] according to claim 142, wherein [:] said detection means comprises a two-dimensional array of photoelectric conversion elements, [;] and

wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

155. (Amended) An apparatus [Apparatus] according to claim 154, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the smaller [of the] difference signal [signals] of a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

156. (Amended) An apparatus [Apparatus] according to claim 154, wherein said threshold setting means sets [is adapted to set] the threshold value at the difference signal corresponding to the greater [of the] difference signal [signals] of a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

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157. (Amended) An apparatus [Apparatus] according to claim 142, wherein said detection means comprises a two-dimensional array of photoelectric conversion elements, [;] and

wherein said threshold setting means sets [is adapted to set] the threshold value based on the difference signals of a predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element having the largest [maximum] difference signal.

158. (Amended) An apparatus [Apparatus] according to claim 156, wherein [:] said threshold setting means identifies [is arranged to identify] a number m of contiguous photoelectric conversion elements situated adjacent to the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the maximum difference signal being 2m, [;] and

wherein said threshold setting means sets [is adapted to set] the threshold value based on difference signals corresponding to the identified photoelectric conversion elements and the largest [maximum] difference signal.

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~~165~~. (Amended) An apparatus [Apparatus] according to claim 154, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

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wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

160 ~~166~~. (Amended) An apparatus [Apparatus] according to claim 155, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

161 ~~167~~. (Amended) An apparatus [Apparatus] according to claim 156, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

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wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

162 ~~168~~. (Amended) An apparatus [Apparatus] according to claim 157, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

163 ~~169~~. (Amended) An apparatus [Apparatus] according to claim 158, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

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wherein the threshold setting means sets the [is adapted to set a] threshold value based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

164 ~~170~~. (Amended) A method for providing an electrical signal corresponding to a position on a screen surface designated by [of] a light source having a cyclically varying intensity, comprising the steps of:

displaying an image from the light source on the screen surface;

receiving light from the screen surface by using a plurality of photoelectric conversion elements, arranged in a predetermined physical array, that each generate an output based on the intensity of light received from the light source at the respective element;

generating, [obtaining a difference signal] for each photoelectric conversion element, a difference signal corresponding to [the] a difference between the output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the light source and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle;]

setting a threshold value for the difference signal;

selecting effective photoelectric conversion elements based on [the basis of] the threshold value; and

outputting a coordinate output signal based on the difference signals corresponding to the selected effective photoelectric conversion elements.

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165 ~~171.~~ (Amended) A method according to claim ~~170~~ 164, wherein [:] a linear array of photoelectric conversion elements is used in said receiving [setting] step, and [including the step of: setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

166 ~~172.~~ (Amended) A method according to claim ~~171~~ 165, [including the step of: setting] wherein the threshold value is set in said setting step at the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

167 ~~173.~~ (Amended) A method according to claim ~~171~~ 165, [including the step of: setting] wherein the threshold value is set in said setting step at the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

168 ~~174.~~ (Amended) A method according to claim ~~170~~ 164, [including the step of: setting] wherein the threshold value is set in said setting step based on the difference signals of a

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predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element having the largest [maximum] difference signal.

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169 ~~175.~~ (Amended) A method according to claim ~~174~~, further comprising [including] the step [steps] of:

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the largest difference signal being 2m, [; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

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170 ~~176~~. (Amended) A method according to claim ~~170~~, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

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171 ~~177~~. (Amended) A method according to claim ~~171~~ 165, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

172 ~~178~~. (Amended) A method according to claim ~~172~~ 166, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

173 ~~179~~. (Amended) A method according to claim ~~173~~ 167, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

AS CONT'D integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

174 ~~180.~~ (Amended) A method according to claim ~~174~~ 168, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

175 ~~181.~~ (Amended) A method according to claim ~~175~~ 169, wherein said receiving [detection] step further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

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CONT'D

176 182. (Amended) A method according to claim 164, wherein [:] a two-dimensional array of photoelectric conversion elements is used in said receiving [setting] step, and [including the step of: setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

177 183. (Amended) A method according to claim 176, [including the step of: setting] wherein the threshold value is set in said setting step at the difference signal corresponding to the smaller [of the] difference signal [signals] of a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

178 184. (Amended) A method according to claim 176, [including the step of: setting] wherein the threshold value is set in said setting step at the difference signal corresponding to the greater [of the] difference signal [signals] of [the] a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

179 185. (Amended) A method according to claim 164, wherein [:] a two-dimensional array of photoelectric conversion elements is used in said receiving [setting] step, and [including the step of: setting]

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wherein the threshold value is set in said setting step based on the difference signals of a predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element having the largest [maximum] difference signal.

180 ~~186~~. (Amended) A method according to claim ~~185~~ 179, further comprising [including] the step [steps] of:

identifying a number m of contiguous photoelectric conversion elements situated adjacent to the photoelectric conversion element having the largest [maximum] difference signal, [; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the identified photoelectric conversion elements and the largest [maximum] difference signal.

181 ~~187~~. (Amended) A method according to claim ~~182~~ 176, wherein said receiving step [detection means] further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

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182 ~~188~~. (Amended) A method according to claim ~~183~~ 177, wherein said receiving step [detection means] further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

183 ~~189~~. (Amended) A method according to claim ~~184~~ 178, wherein said receiving step [detection means] further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

184 ~~190~~. (Amended) A method according to claim ~~185~~ 179, wherein said receiving step [detection means] further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

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integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

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185 ~~191.~~ (Amended) A method according to claim ~~186~~, wherein said receiving step [detection means] further comprises:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and setting]

wherein the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

192. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 170.

193. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 171.

194. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 172.

195. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 173.

196. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 174.

197. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 175.

198. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 176.

199. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 177.

200. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 178.

201. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 179.

202. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 180.

203. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 181.

204. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 182.

205. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 183.

206. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 184.

207. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 185.

208. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 186.

209. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 187.

210. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 188.

211. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 189.

212. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 190.

213. A data carrier carrying instructions implementable by a processor for carrying out the method of claim 191.

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CONT'D 208 214. (Amended) A coordinate [Coordinate] input apparatus for use with a processor provided with a display means capable of displaying images on a screen surface, the coordinate input apparatus comprising:

designation means for designating a position [providing] on the screen surface with a light [spot] source having a cyclically varying intensity;

detection means [for receiving light emitted from said light source and] comprising a plurality of photoelectric conversion elements arranged in a predetermined physical array, for

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receiving light emitted from the light source and for providing an electrical output based on [the basis of] the received light; and

a data carrier carrying instructions implementable by the processor for carrying out the [following] steps comprising:

calculating a difference signal for each photoelectric conversion element corresponding to [the] a difference between an output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the intensity of the light spot, and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point; [at a second, lower intensity, point in the said cycle of variation of intensity of the light spot;]

setting a threshold value for the difference signal corresponding to each of the photoelectric conversion elements;

selecting effective photoelectric conversion elements based on [the basis of] the threshold value; and

generating a coordinate output signal based on [the basis of] the difference signals of the [selected] effective photoelectric conversion elements selected in said selecting step.

209 ~~215~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~214~~ 208, wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step based on the difference signals of a predetermined number of photoelectric conversion elements adjacent to the photoelectric conversion element

AC CONT'D

having the largest [maximum] difference signal.

210 ~~216~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~214~~ 208, wherein [:] said detection means comprises a linear array of photoelectric conversion elements, and

wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step based on difference signals corresponding to two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

211 ~~217~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~216~~ 210, wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step at the difference signal corresponding to the smaller [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

212 ~~218~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~216~~ 210, wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step at the difference signal corresponding to the greater [of the] difference signal [signals] of the two photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

A6 CONT'D

213 ~~219~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~215~~ 209, wherein the data carrier further carries processor implementable instructions for carrying out the step comprising:

identifying a number m of consecutive photoelectric conversion elements situated on each [either] side of the photoelectric conversion element having the largest [maximum] difference signal, with the total number of consecutive photoelectric conversion elements situated on both sides of the photoelectric conversion element having the maximum difference signal being 2m, [; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the 2m identified photoelectric conversion elements and the largest [maximum] difference signal.

214 ~~220~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~215~~ 209, wherein the data carrier further carries processor implementable instructions for carrying out the step comprising:

integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source; and

integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [; and]

wherein [said setting means is adapted to set] the threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

A6 CONT'D

215 ~~221~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~215~~ 209, wherein said detection means further comprises:

integration means for integrating the respective outputs of each photoelectric conversion element at a number of first points in successive cycles of variation of the light source and for integrating the respective outputs of each photoelectric conversion element at a number of second points in successive cycles of variation of the light source, [;] and

wherein the [threshold setting means is adapted to set a] threshold value is set in said setting step based on [the basis of] difference signals calculated from the integrated output values of the photoelectric conversion elements.

216 ~~222~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~214~~ 208, wherein [:] said detection means comprises a two-dimensional array of photoelectric conversion elements, and

wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step based on difference signals corresponding to a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

217 ~~223~~. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~222~~ 216, wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step at the difference signal corresponding to the smallest [of the] difference

AG CONT'D

signal [signals] of a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

218 224. (Amended) A coordinate [Coordinate] input apparatus according to claim ~~222~~ 216, wherein the data carrier carries processor implementable instructions for [:] setting the threshold value in said setting step at the difference signal corresponding to the greater [of the] difference signal [signals] of a number of photoelectric conversion elements equally spaced from the photoelectric conversion element having the largest [maximum] difference signal.

219 ~~225.~~ (Amended) A coordinate [Coordinate] input apparatus according to claim ~~213~~ 207, wherein the data carrier further carries processor implementable instructions for carrying out the step comprising:

identifying a number m of consecutive photoelectric conversion elements situated on each side of the photoelectric conversion element having the largest [maximum] difference signal, [; and setting]

wherein the threshold value is set in said setting step based on difference signals corresponding to the identified photoelectric conversion elements and the largest [maximum] difference signal.

220 ~~226.~~ (Amended) A coordinate [Coordinate] input apparatus for use with a processor provided with a display means capable of displaying images on a screen surface, the coordinate input apparatus comprising:

AG CONT'D

designation means for designating a position [providing] on the screen surface with a light [spot] source having a cyclically varying intensity;

detection means [for receiving light emitted from said light source and] comprising a plurality of photoelectric conversion elements arranged in a predetermined physical array, for receiving light emitted from the light source and for providing an electrical output based on [the basis of] the received light; and

instructions for operating the processor for carrying out the following steps:

calculating a difference signal for each photoelectric conversion element corresponding to [the] a difference between an [the] output of the photoelectric conversion element when the light source cycle is at a first point and an [at a first, higher intensity, point in the cycle of variation of the intensity of the light spot, and the] output of the photoelectric conversion element when the light source cycle is at a second point, the first point being at a higher intensity than the second point, [at a second, lower intensity, point in the cycle of variation of the intensity of the light spot;]

setting a threshold value for the difference signal;

selecting effective photoelectric conversion elements based on [the basis of] the threshold value; and

generating a coordinate output signal based on [the basis of] the difference signals of the [selected] effective photoelectric conversion elements selected in said selecting step.